



Air Quality
PERMIT TO CONSTRUCT
State of Idaho
Department of Environmental Quality

PERMIT No.: P-2008.0130

FACILITY ID No.: 001-00093

AQCR: 64 **CLASS:** SM **ZONE:** 11

SIC: 5171 **NAICS:** 424710

UTM COORDINATE (km): 567.2, 4833.2

1. PERMITTEE

Tesoro Refining and Marketing Co.

2. PROJECT

Permit to Construct Modification

3. MAILING ADDRESS

321 North Curtis Road

CITY

Boise

STATE

ID

ZIP

83706

4. FACILITY CONTACT

Jeff Carter/Brooks Neighbors

TITLE

Terminal Manager/Environmental
Compliance Supervisor

TELEPHONE

(208) 375-5558/210-626-6327

5. RESPONSIBLE OFFICIAL

Jeff Carter

TITLE

Terminal Manager

TELEPHONE

(208) 375-5558

6. EXACT PLANT LOCATION

321 North Curtis Road, Boise, Idaho

COUNTY

Ada

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Petroleum Product Storage and Distribution

8. PERMIT AUTHORITY

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200 through 228, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes in design, equipment or operations may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 through 228 of the Rules for the Control of Air Pollution in Idaho.

SHAWNEE CHEN, P.E., PERMIT WRITER
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE MODIFIED/REVISED:

Proposed for Public
Comment

DATE ISSUED:

May 23, 2006

MIKE SIMON, STATIONARY SOURCE PROGRAM
MANAGER
DEPARTMENT OF ENVIRONMENTAL QUALITY

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Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
DEQ	Idaho Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
mm	millimeters
NAICS	North American Industry Classification System
NSPS	New Source Performance Standards
PTC	permit to construct
SIC	Standard Industrial Classification
SM	synthetic minor
TOCs	total organic compounds
UTM	Universal Transverse Mercator

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1. PERMIT TO CONSTRUCT SCOPE

Purpose

- 1.1 This permit modification allows the permittee to load ethanol, or ethanol/gasoline blends at the loading rack.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by a date citation located directly under the permit condition and on the right hand margin.
- 1.3 This Permit to Construct (PTC) replaces PTC No. P-050055, issued on May 23, 2006, the terms and conditions of which shall no longer apply.

Regulated Sources

- 1.4 Table 1.1 lists all sources of regulated emissions in this PTC.

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
2	Loading rack	Vapor combustion system
3	Bulk gasoline terminal (refer to 40 CFR 63 Subpart BBBBBB for details)	Varies

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2. EMISSIONS UNIT #1 – LOADING RACK

2.1 Process Description

The primary purpose of the loading rack is to transfer liquid petroleum products to mobile tank trucks. The rack consists of three loading bays, and has a rated capacity of 324,000 gallons per hour.

2.2 Emissions Control Description

Emissions from the loading rack are controlled by a vapor combustion system. For purposes of the PTC, the term “vapor combustion unit” refers solely to the incineration unit. The term “vapor combustion system” refers to the vapor combustion unit and the vapor collection system, inclusive.

The system is a John Zink Model GV-ZTOF-6220-2, and has been refurbished by Jordan Technologies. The system has a maximum capacity of 8,000 gallons per minute, and is guaranteed to not exceed 35 milligrams of total organic compounds per liter of gasoline loaded as required by 40 CFR 60.502.

Emissions Limits

2.3 Particulate Matter Emissions Limits for Incinerators

Particulate matter emissions from the vapor combustion unit shall not exceed 0.2 pounds per 100 pounds of TOC combusted.

2.4 Visible Emissions Limit

Visible emissions from the vapor combustion system stack, or any other stack, vent, or functionally equivalent opening associated with the vapor combustion system, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.5 Total Organic Compound Emissions Limits – NSPS Requirements

In accordance with 40 CFR 60.502(b), the emissions to the atmosphere from the vapor combustion system due to the loading of liquid product into gasoline tank trucks shall not exceed 35 milligrams of total organic compounds per liter of gasoline loaded. For purposes of this permit, TOC shall be defined in accordance with 40 CFR 60.501.

Operating Requirements

2.6 Throughput Limits

The maximum annual motor gasoline, motor gasoline/denatured ethanol blends, and denatured ethanol throughput of the loading rack shall not exceed 280,000,000 gallons per year.

[DRAFT]

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2.7 Vapor Combustion System Requirements

At all times when any gasoline tank truck, as defined in 40 CFR 60.501, motor gasoline loading operation is conducted at the loading rack, the vapor combustion system shall be in operation with a pilot flame present.

2.8 Allowable Liquid Products

The permittee shall only use the loading rack to dispense motor gasoline, motor gasoline/denatured ethanol blends, and denatured ethanol, jet fuels, No. 1 diesel fuel, and No. 2 diesel fuel.

[DRAFT]

2.9 Loading Rack and Vapor Combustion System Requirements – NSPS Requirements

The permittee shall operate the loading rack and vapor combustion system in accordance with the applicable requirements of 40 CFR 60, including, but not limited to the following:

- 2.9.1 Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks.
- 2.9.2 In the event that a non-vapor-tight gasoline tank truck is loaded, the permittee shall notify the owner or operator of the gasoline tank truck within one week of the documentation crosscheck required in Permit Condition 2.13.3.
- 2.9.3 In the event that a non-vapor-tight gasoline tank truck is loaded, the permittee shall take steps to assure that the gasoline tank truck will not be reloaded at the facility until vapor tightness documentation for that tank is obtained.
- 2.9.4 The permittee shall act to assure that loadings are only made into gasoline tank trucks equipped with vapor collection equipment that is compatible with the vapor combustion system.
- 2.9.5 The permittee shall act to assure the vapor combustion system and the gasoline tank truck's vapor collection system is connected during each loading of the gasoline tank truck.
- 2.9.6 The vapor combustion system and loading rack shall be designed and operated to prevent gauge pressure into the delivery tank from exceeding 4,500 Pascals during product loading.
- 2.9.7 No pressure-vacuum vent in the vapor combustion system shall begin to open at a system pressure less than 4,500 Pascals.
- 2.9.8 Once per calendar month, the loading rack and vapor combustion system shall be inspected during the loading of a gasoline tank truck for TOC liquid or vapor leaks using sight, sound, and smell. Any leak detected during the inspection shall be repaired within 15 calendar days after detection.
- 2.9.9 In accordance with 40 CFR 60.11(d), the loading rack and vapor combustion system shall be maintained in good working order to the extent practicable at all times.
- 2.9.10 In accordance with 40 CFR 60.12, the permittee shall not build, erect, or install any equipment or process that conceals an emission which would otherwise constitute a violation, including use of gaseous diluents.

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2.10 Air Pollution Emergency Rule

The permittee shall comply with the *Air Pollution Emergency Rule* in IDAPA 58.01.01.550-562.

Monitoring and Recordkeeping Requirements

2.11 Throughput Monitoring

Each calendar month, the permittee shall monitor and record the throughput of the loading rack for that month and for the most recent 12-month period. Records of this information shall be kept on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

2.12 Vapor Combustion System Monitoring

The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer specifications, thermocouples or other equivalent devices, which detect the presence of the pilot flame.

- 2.12.1 When a pilot flame is not present during motor gasoline loading, the following information shall be recorded: the date, the duration of time the flame was not present, the reason the flame was not present, and any corrective action or maintenance taken. Records of this information shall be kept on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

2.13 Loading Operation Monitoring – NSPS Requirements

A compilation of the most recent two years of records, unless otherwise specified below, shall be kept on site and made available to DEQ representatives upon request. The permittee shall monitor and record the following information.

- 2.13.1 Vapor tightness documentation, in accordance with 40 CFR 60.505(b), shall be obtained for each gasoline tank truck to be loaded. This documentation shall be kept in a permanent form at the facility, and shall be updated at least once per year. The documentation shall include: 1) Test title: Gasoline Delivery Tank Pressure Test – EPA Reference Method 27, 2) tank owner and address, 3) tank identification number, 4) testing location, 5) date of test, 6) tester name and signature, 7) witnessing inspector, if any: name, signature, and affiliation, 8) test results: actual pressure change in five minutes, mm of water (average for two runs).
- 2.13.2 The tank identification number of each gasoline tank truck loaded at the facility.
- 2.13.3 The tank identification number obtained for each gasoline tank truck shall be cross-checked with the file of tank vapor tightness documentation within two weeks after the corresponding tank is loaded, unless the conditions of 40 CFR 60.502(e)(3)(i)(A) or (B) are maintained.
- 2.13.4 Any notification required under Permit Condition 2.9.2 shall be documented.
- 2.13.5 A record of each monthly leak inspection required by Permit Condition 2.9.8. Any leak detected during the inspection shall be recorded. The records shall specify the date of the inspection, inspection findings, the leak determination method, the corrective action if applicable, and the inspector's name and signature.

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- 2.13.6 The permittee shall maintain records of the performance tests conducted pursuant to Permit Condition 2.14 in a form suitable for inspection.

2.14 Performance Test – NSPS Requirements

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial startup, the permittee shall conduct performance tests as required by 40 CFR 60.503. This initial performance test, and any subsequent performance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157, General Provision 2 of this permit, and the following requirements:

- 2.14.1 Immediately before the performance tests required in Permit Conditions 2.14.2 and 2.14.3, the permittee shall use EPA Method 21 to monitor for leakage of vapor from all potential sources in the vapor combustion system while a gasoline tank truck is being loaded. All leaks with a vapor pressure of 10,000 ppm or greater, as methane, shall be repaired prior to conducting the performance tests in Permit Conditions 2.14.2 and 2.14.3.
- 2.14.2 The permittee shall conduct performance tests in accordance with 40 CFR 60.503(c) to determine compliance with Permit Condition 2.5. The three-run requirement of 40 CFR 60.8(f) does not apply to this test. The test shall use the equation in 40 CFR 60.503(c)(3) to determine the TOC emissions rate. The volume of air-vapor mixture exhausted at each interval shall be determined using EPA Method 2B. The TOC concentration at each interval shall be determined using EPA Method 25A or 25B, and the calibration gas shall be either propane or butane. The total volume of gasoline loaded shall be determined from facility records or from dispensing meters at the loading rack.
- 2.14.3 The permittee shall conduct performance tests in accordance with 40 CFR 60.503(d) to determine compliance with Permit Condition 2.9.6. The three-run requirement of 40 CFR 60.8(f) does not apply to this test. The permittee shall calibrate and install a pressure measurement device capable of measuring up to 500 mm of water gauge pressure, with an accuracy of ± 2.5 mm of water, on the vapor combustion system at a pressure tap located as close as possible to the connection with the gasoline tank truck. During the performance test, the pressure shall be recorded every five minutes while a gasoline tank truck is being loaded. The highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

Reporting Requirements

2.15 Performance Test Protocol

The permittee is encouraged to submit a test protocol to DEQ for approval at least 30 days prior to the performance test required in Permit Condition 2.14. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the test does not satisfy the testing requirements.

2.16 Performance Test Notification – NSPS Requirement

The permittee shall provide EPA and DEQ notification at least 30 days prior to the date that the performance tests in Permit Condition 2.14 are to be conducted.

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2.17 Performance Test Report – NSPS Requirement

The permittee shall submit a report of the results of the performance tests required in Permit Condition 2.14, including all required process data, to EPA and DEQ within 30 days after the date on which the tests are concluded.

2.18 Startup, shutdown, Malfunction Notification – NSPS Requirements

In accordance with 40 CFR 60.7(b), the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, and any malfunction of the vapor combustion unit.

2.19 Physical or Operation Change Notification – NSPS Requirement

Sixty days prior to the change, the permittee shall submit written notification to EPA and DEQ of any physical or operational change to the existing facility, which may increase the emissions rate of any regulated pollutant, unless that change is specifically exempted under 40 CFR 60.14(e) or other applicable provision.

2.20 Addresses for Submittals

All required reporting to EPA shall be submitted to the following address:

EPA, Region 10
Air Operating Permits, OAQ-107
1200 Sixth Ave.
Seattle, WA 98101

All required reporting to DEQ shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83706-2239

2.21 The permittee shall comply with 40 CFR 60 Subpart XX and Subpart A. Should, there be a conflict between 40 CFR 60 Subpart XX and Subpart A, and Permit Conditions 2.5, 2.9, 2.13, 2.14, 2.16, 2.17, 2.18 and 2.19, requirements in 40 CFR 60 Subpart XX and Subpart A shall govern.

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3. GASOLINE DISTRIBUTION BULK TERMINAL

40 CFR 63 Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

- 3.1** The permittee shall comply with 40 CFR 63 Subpart BBBBBB upon the compliance date as specified in 40 CFR 63.11083 (b).

[DRAFT]

- 3.2** Upon the aforementioned compliance date, the permittee shall submit a complete PTC application to include 40 CFR 63 Subpart BBBBBB requirements that apply to the facility in the permit.

[DRAFT]

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4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
[Idaho Code §39-101, et seq.]
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
[IDAPA 58.01.01.211, 5/1/94]
3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.
[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

4. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
 - a. Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
 - a. A notification of the date of initiation of construction, within five working days after occurrence;
 - b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

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- c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211, 5/1/94]

Performance Testing

- 6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

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Excess Emissions

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

9. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

10. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

11. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

12. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

13. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]